Bal Bharati
PUBLIC SCHOOL
RGPPL RATNAGIRI
ACADEMIC YEAR 2022-23
Worksheet No. 2
Subject:MATHEMATICS

Grade: IX   CH-4- LINEAR EQUATIONS IN TWO VARIABLES

1. The point of the form (a, a) always lies on:

   (a) x – axis   (b) y – axis   (c) on the line y = x (d) on the x + y =0

2. Which of the following is not a linear equation in two variables?

   (a) ax + by = c   (b) ax^2 + by = c   (c) 2x + 3y = 5   (d) 3x + 2y = 6

3 Find the value of k, if $x = 2$, $y = 1$ is a solution of the equation $2x + 3y = k$.

4 Find the points where the graph of the equation $3x + 4y = 12$ cuts the x-axis and the y-axis.

5 Present ages of Anu and Raj are in the ratio 4:5. Eight years from now the ratio of their

   ages will be 5:6. Find their present ages.

6. A positive number is 5 times another number. If 21 is added to both the numbers, then one

   of the new numbers becomes twice the other new number. What are the numbers?

7. A three-wheeler scoter charges Rs. 10 for the first km and Rs. 4.50 each for every subsequent

   km. For a distance of x km, an amount of Rs. Y is paid. Write the linear equation representing

   the above information

8. The digits of a two-digit number differ by 3. If the digits are interchanged, and the resulting

   number is added to the original number, we get 143. What can be the original number?

9. There is a narrow rectangular plot, reserved for a school, in Mahuli village. The length and

   breadth of the plot are in the ratio 11:4. At the rate Rs100 per metre it will cost the village

   panchayat Rs 75000 to fence the plot. What are the dimensions of the plot?

10. A man's age is three times his son's age. Ten years ago he was five times his son's

    age. Find their present ages.

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